

IN THE CLAIMS

Please cancel claim 9 and amend the claims as follows:

1. (Currently Amended) A substrate for use in a data storage system, comprising:

at least one core layer comprising at least one plastic or plastic composite material exhibiting a modulus of about 350 kpsi or greater; wherein said plastic composite material is filled with elastic and damping particles agents, anisotropic reinforcing agents, or combinations thereof, wherein the damping agents, reinforcing agents, or combinations thereof, are substantially uniformly distributed within the plastic or plastic composite material; and

one or more skin layers disposed adjacent the at least one core layer, wherein the at least one core layer has a greater thickness than the one or more skin layers.

2. (Currently Amended) The substrate of claim 1 wherein said the plastic or plastic composite material exhibits a modulus in the range of about ~~400~~ 350 to 3,000 kpsi.

3. (Currently Amended) The substrate of claim 1 wherein said the plastic or plastic composite material is selected from the group consisting of polysulfone (PSU), polyethersulfone (PES), polyetherimide (PEI), polyphenylsulfide (PPS), polyphthalamide (PPA), liquid crystal polymer (LCP), polyetheretherketone (PEEK), polycarbonate (PCB) and any combinations thereof.

4. (Cancelled)

5. (Currently Amended) The substrate of claim 1 wherein said the anisotropic reinforcing agents are selected from the group consisting of carbon fibers, glass fibers, mineral particles and any combinations thereof.

Amendment
Serial No. 09/314,262
Page 4

6. (Cancelled)

7. (Currently Amended) The substrate of claim 1 wherein the damping [particles] agents, ~~anisotropic~~ reinforcing agents, or combinations thereof in the plastic or plastic composite material have a concentration in the range of about 5 to 65 weight %.

8. (Currently Amended) The substrate of claim 1 where the at least one core layer ~~said at least one plastic composite material comprises two or more layers of said material, and any combination thereof~~ comprises one or more sublayers, wherein each sublayer comprises a different plastic or plastic composite material, different damping agents, reinforcing agents, or combinations thereof.

9. (Cancelled)

10. (Cancelled)

11. (Original) The substrate of claim 1 wherein said substrate is formatted with servo control patterns.

12. (Currently Amended) ~~A disk including a~~ The substrate of claim 1, and further comprising:

a magneto-optical MO or magnetic recording MR layer structure disposed on the at least one core layer or one or more skin layers; and

a carbon overcoat formed atop said magneto-optical MO or magnetic recording MR layer structure.

13. (Currently Amended) The disk substrate of claim 12, ~~further comprising:~~ wherein the substrate is disposed in a data storage system comprising:

a read/write head;

an actuator for moving said read/write head; and

Amendment
Serial No. 09/314,262
Page 5

a motor for rotating said disk.

14. (Currently Amended) A substrate for use in a data storage system, comprising:

at least one core layer made of a plastic or plastic composite material having damping agents, reinforcing agents, or combinations thereof; and

~~at least one skin~~ one or more skin layers made of a plastic or plastic composite material, and formed ~~atop on~~ on at least one surface of said ~~the~~ the core layer, wherein at least one of said ~~the~~ the core or ~~the one or more~~ the one or more skin layers exhibits a modulus of 350 kpsi or greater, and wherein ~~the plastic or plastic composite material is filled with viscoelastic damping particles, anisotropic reinforcing agents, or combinations thereof~~ wherein the at least one core layer has a greater thickness than the one or more skin layers.

15. (Currently Amended) The substrate of claim 14 wherein said plastic or plastic composite material is selected from ~~[[:]]~~ the group consisting of polysulfone (PSU), polyethersulfone (PES), polyetherimide (PEI), polyphenylsulfide (PPS), polyphthalamide (PPA), liquid crystal polymer (LCP), polyetheretherketone (PEEK), polycarbonate (PCB) and any combinations thereof.

16. (Currently Amended) The substrate of claim 14 wherein the ~~viscoelastic~~ damping particles, ~~anisotropic~~ reinforcing agents, or combinations thereof, in the plastic or plastic composite material have a concentration in the range of about 5 to 65 weight %.

17. (Currently Amended) The substrate of claim 16 wherein ~~said anisotropic~~ the reinforcing agent is selected from carbon fibers, glass fibers, mineral particles and any combination thereof.

18. (Cancelled)

Amendment
Serial No. 09/314,262
Page 6

19. (Currently Amended) An apparatus, comprising:
a disk drive spindle motor; and
at least one data storage disk mounted on said disk drive spindle motor wherein said storage disk comprises at least one core layer that is formed of a plastic or plastic composite material and damping agents, reinforcing agents, or combinations thereof, wherein the damping agents, reinforcing agents, or combinations thereof, are substantially uniformly distributed within the plastic or plastic composite material; and
one or more skin layers disposed adjacent the at least one core layer, wherein the at least one core layer has a greater thickness than the one or more skin layers at least one plastic composite material exhibiting a modulus of about 350 kpsi or greater, wherein said plastic composite material is filled with elastic damping particles, anisotropic reinforcing agents, or combinations thereof.
20. (Cancelled)
21. (New) The substrate of claim 1, wherein the one or more skin layers comprise a plastic or plastic composite material free of damping agents, reinforcing agents, or combinations thereof.
22. (New) The substrate of claim 1, wherein the at least one core layer comprises polyetherimide and mineral particles, and the one or more skin layers comprise polyetherimide.
23. (New) The substrate of claim 1, wherein the one or more skin layers comprise a polycarbonate material.
24. (New) The substrate of claim 1, wherein the substrate comprises a core layer having an upper surface and a bottom surface, a first skin layer disposed on the upper surface, and a second skin layer disposed on the bottom surface.